

We claim:

1. A semiconductor component, comprising:

a first metal layer forming a first metal area and a second metal area electrically insulated from one another;

a dielectric layer;

a second metal layer produced separately from said first metal layer and forming a third metal area insulated from said first metal layer by an interposition of said dielectric layer, and said third metal area together with said dielectric layer and said first metal area forms a memory element, said second metal layer further forming a fourth metal area which together with said second metal area forms a contact area used to make contact with said second metal layer;

an insulation layer covering said contact area and said memory element and having at least one opening formed therein and leading to said contact area; and

an electrically conductive material filling said opening for making contact with said second metal layer.

2. The semiconductor component according to claim 1, wherein said contact area is used as an etching resist during etching of said opening.

3. The semiconductor component according to claim 1, wherein said fourth metal area makes direct contact with said second metal area.

4. The semiconductor component according to claim 1, wherein said fourth metal area is insulated from said second metal area by the interposition of said dielectric layer.

5. The semiconductor component according to claim 1, wherein said second metal layer has an electrically conductive connection between said third metal area and said fourth metal area.

6. The semiconductor component according to claim 1, wherein said first metal layer and said second metal layer are composed of a noble metal.

7. The semiconductor component according to claim 1, wherein said dielectric layer is composed of a material selected from the group consisting of a ceramic material having a high dielectric constant and a ferroelectric ceramic material.

8. The semiconductor component according to claim 1, wherein at least one further opening is formed in said insulation layer.

9. The semiconductor component according to claim 6, wherein said noble metal is selected from the group consisting of platinum and platinum alloys.

10. A method for producing a semiconductor component, which comprises the steps of:

providing a semiconductor component;

applying a first metal layer to a surface of the semiconductor component;

selectively removing the first metal layer for forming a first metal area and a second metal area electrically insulated from the first metal area;

applying a dielectric layer to the surface of the semiconductor component, to the first metal area and the second metal area;

selectively removing the dielectric layer with the dielectric layer remaining at least on the first metal area;

applying a second metal layer to the surface;

selectively removing the second metal layer for forming further metal areas including a third metal area remaining on the first metal area, and a fourth metal area remaining on said second metal area, and the fourth metal area together with the second metal area forming a contact area;

applying an insulation layer on the surface; and

selectively etching through the insulation layer as far as the contact area, with the contact area used as an etching resist during the process of etching through the insulation layer.

11. The method according to claim 10, wherein after the selectively removing of the second metal layer step, electrically conductive connections formed by the second metal layer remain between the third metal area and the fourth metal area.

12. The method according to claim 10, which comprises forming at least one further opening in the insulation layer during the selectively etching step.

Abstract of the Disclosure:

A semiconductor component having a material-reinforced contact area formed of a metal layer is disclosed. The contact area is jointly formed by a second metal area of a first metal layer and a fourth metal area of a second metal layer which is to be contacted. A thickness of the contact area material is at least twice that of a single metal layer and thereby prevents penetrative etching when a hole is created for contacting the metal layer.

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